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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,627	02/13/2004	Fabrizio Fabbri	FABBRI4	5356
1444 7590 11/21/2007 BROWDY AND NEIMARK, P.L.L.C. 624 NINTH STREET, NW SUITE 300 WASHINGTON, DC 20001-5303			EXAMINER BERTHEAUD, PETER JOHN	
			ART UNIT 3746	PAPER NUMBER
			MAIL DATE 11/21/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/777,627

Applicant(s)

FABBRI, FABRIZIO

Examiner

Peter J. Bertheaud

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 August 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/7/2007 has been entered. It is noted that claim 1 has been amended.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the seats being provided within a single block, along with the cylinders, conduits, and manifolds, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet,

Art Unit: 3746

and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-6 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In claim 1, lines 5-7, it is stated "said cylinders being provided within a single block formed as a unit together with said seats, said conduits, and said manifolds". However, the seats, as indicated by reference numeral 8, are provided within the casing 1 and not in the head 7. The head 7 would have to be the single block as it contains the cylinders, manifolds, and the conduits. Therefore, the claim is not enabled by the disclosure

Art Unit: 3746

because the seats 8 are provided within the casing 1 while the cylinders, conduits, and manifolds are provided within the head 7 (single block).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being anticipated by Mulvey 3,849,302 in view of Elliott 4,618,316.

Mulvey discloses a high pressure reciprocating pump comprising at least two in-line cylinders (see Fig.1), wherein each has a seat for a plunger 22 and is connected via a conduit and to an intake manifold 47 and to a delivery manifold 48, said cylinders being provided within a single block formed as a unit together (see 29 in Fig. 2) with said conduits, characterized in that the intake manifold 47 is positioned in front of the line of cylinders and is in direct communication with the cylinders via a conduit connected to a dead compartment (see area directly above valve cap 58) provided as an extension of the respective cylinder and in which the intake valve is located, retained in position by a deformable element 56. Mulvey also discloses that the intake manifold has its axis coplanar with the cylinder axis (see axis of cylinder 30 in Fig. 2). Mulvey also discloses that the compartment containing the intake valve 52, 58 is cylindrical and

Art Unit: 3746

coaxial with the respective cylinder (see Fig. 2). However, Mulvey does not teach the following claimed limitations taught by Elliot

Elliott teaches a reciprocating pump assembly including a plunger 16, an inlet manifold 22, a delivery manifold 26, as well as conduits and valves 36, 52 for both. Elliott further teaches a plunger seat (see cylinder 30) and that the cylinder 30 is provided within a single block 20 together with said seat, said conduits, and said manifolds (see Fig. 1) and that cylinder 30 communicates with the compartment containing the delivery valve via two parallel conduits (see 58, Fig. 3, and col.4, lines 32-36). Elliott teaches that these aspects of the invention would be advantageous because only one closure member 76 is needed to secure and tighten the valve assemblies, and because the separator of the two parallel conduits provides a seat 58 for the valve 52.

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify the fluid flow control device of Mulvey by providing the in-line cylinders together with said seats, said conduits, and said manifolds within a single block and by having two parallel conduits communicate with the delivery valve, as taught by Elliott, in order to decrease the amount of closure members needed to seal the pump (see col.4, lines 52-60) as well as provide the delivery valve with a valve seat 58.

Furthermore, in reference to the amended portion of claim 1, the determination of patentability in a product-by-process claim is based on the product itself, even though the claim may be limited and defined by the process. That is, the product in such a claim is unpatentable if it is the same as or obvious from the product of the prior art,

Art Unit: 3746

even if the prior product was made by a different process. In re Thorpe, 777 F.2d 695, 697, 227 USPQ 964, 966 (Fed. Cir. 1985). A product-by-process limitation adds no patentable distinction to the claim, and is unpatentable if the claimed product is the same as a product of the prior art.

7. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mulvey 3,849,302 in view of Elliott 4,618,316, and in further view of Hagler 3,306,214.

Mulvey in view of Elliott disclose the invention as discussed above. However, Mulvey in view of Elliott do not disclose that the deformable means are the actual valve seat sealing gaskets or that the deformable means is an elastic plate.

Hagler teaches a pressure control apparatus including a plunger 17 contained within a cylinder, an inlet check valve 24, and a deformable means 19. Hagler further teaches that the deformable element is the valve seat sealing gasket (see col. 1, lines 63-68) and that the deformable element is an elastic plate. Hagler teaches that these aspects of the invention would be advantageous because they make the pump capable of delivering a liquid under rapidly and widely varying pressure and flow.

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify the pump assembly of Mulvey and Elliott by making the deformable means a sealing gasket or an elastic plate, as taught by Hagler, in order to deliver a liquid under rapidly and widely varying pressure and flow (see col.1, lines 14-22).

Response to Arguments

8. Applicant's arguments filed 8/7/2007 have been fully considered but they are not persuasive.

9. In response to Applicant's argument with respect to Mulvey: Applicant argues that Mulvey does not teach the cylinders being within a single block formed as a unit together with the seats of the valve, the conduits, and the manifolds. Examiner would like to point out that in the Final Rejection it was stated that Mulvey only disclosed "said cylinders being provided within a single block formed as a unit together (see 29 in Fig. 2) with said seats and said conduits". Examiner never stated that the single block in Mulvey also contained the manifolds, as indicated by the Applicant. Elliot was used to disclose this limitation.

Nevertheless, Examiner has changed the grounds of rejection with respect to these limitations: Elliot is now responsible for teaching that the cylinder 30 is provided within a single block 20 together with said seat, said conduits, and said manifolds. Although Mulvey does indeed disclose a seat within the single block 29, the seat is not the block itself, as indicated by the newly submitted drawings by the Applicant, but a series of seals and a grease ring. Examiner felt the structure of Elliot better read on the limitation, thus providing the reason for changing the grounds of rejection.

10. In response to Applicant's arguments with respect to the amended part of claim 1: This amendment merely presents a product-by-process limitation, please see the last paragraph in the above rejection.

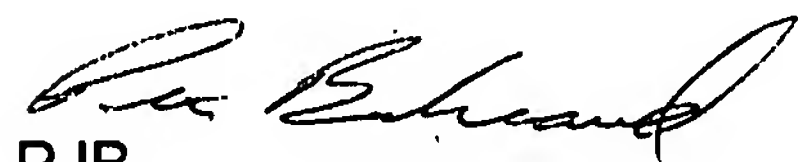
Art Unit: 3746

Conclusion

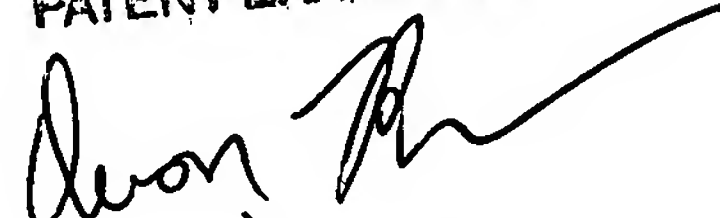
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter J. Bertheaud whose telephone number is (571) 272-3476. The examiner can normally be reached on M-F 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Kramer can be reached on (571) 272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


PJB
11/15/07

DEVON C. KRAMER
PATENT EXAMINER


11/16/07